Commonwealth of Kentucky
Division for Air Quality

PERMIT APPLICATION SUMMARY FORM

(For all sources except PSD and true minor sources)
Completed by: Sumit Singh

General Information

Name:	Johnson Controls, Incorporated
Address:	Johnson Controls FoaMech Plant P.O. Box 679 Georgetown, Kentucky 40324
Date application received:	December 13, 1996
SIC/Source description:	2531, 3714
AFS(9-digit) Plant ID:	21-209-0020
EIS #:	102-3640-0020
Finds #:	KYD074708462
Application log number:	E975, F380
Permit number:	V-98-005

Application Type/Permit Activity

[ ] Initial issuance
[ ] Permit modification
__Administrative
__Minor
__Significant
[ ] Permit renewal
[ ] General permit
[ ] Conditional major
[✔] Title V
[✔] Synthetic minor
[ ] Operating
[✔] Construction/operating

Compliance Summary

[ ] Source is out of compliance
[ ] Compliance schedule included
[✔] Compliance certification signed

Applicable Requirements list

[✔] NSR
[ ] PSD
[ ] NSPS
[ ] NESHAPS
[ ] SIP
[ ] Other

Miscellaneous

[ ] Acid rain source
[✔] Source subject to 112(r)
[ ] Source applied for federally enforceable emissions cap
[ ] Source provided terms for alternative operating scenarios
[ ] Source subject to a MACT standard
[ ] Source requested case-by-case 112(g) or (j) determination
[ ] Application proposes new control technology
[✔] Certified by responsible official
[✔] Diagrams or drawings included
[✔] Confidential business information (CBI) submitted in application
[ ] Pollution Prevention Measures
[ ] Area is non-attainment (list pollutants):

Emissions Summary

Pollutant	Actual (tpy)	Potential (tpy)
PM	8.67	10.36
SO_2	-	-
NOx	-	-
CO	-	-
VOC	375.12	475.47
LEAD	-	-
HAP $\geq$ 10 tpy (by CAS)	-	-

Source Process Description:

JOHNSON CONTROLS, INC. FOAMECH facility produces polyurethane foam automotive seat cushions using four carousel manufacturing lines. In addition, the facility has two smaller carousels to produce headrests and other automotive components such as arm rests. The source will be adding one additional small carousel manufacturing line and has applied for a construction permit along with the Title V permit. This Title V therefore includes the construction conditions for the new emission point.

Before the start of the molding operation, the interior surface of the molds is prepared so as to prevent the finished parts from sticking to the surface. This operation may involve use of either spray wax mold release agent (applied using air spray application equipment) or the paste wax mold release agent. A mixture of chemicals is poured into the molds which are then sealed. The following chemicals are used in the foam manufacturing process - toluene diisocyanate (TDI), polyols, de-ionized water, amine catalysts, silicone surfactant, diethanol amine (DEOA). Reaction of water with TDI generates carbon dioxide gas which causes spatial expansion (blowing), resulting in the production of foam in the shape of the mold. The process does not require use of blowing agents. Once the foam is properly cured in the curing ovens, the part is removed and inspected for any tears and voids. These are repaired by application of an adhesive glue.

Emission and Operating Caps description:

To avoid triggering 401 KAR 51:017, Prevention of significant deterioration, the VOC emissions from the proposed construction should not exceed 36 tons per year.